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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,273	02/20/2004	Hsiao-Wu Chen	ACMP0051USA	2272

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION  
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EXAMINER
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CASCA, FRED A

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/708,273

Applicant(s)

CHEN ET AL.

Examiner

Fred A. Casca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1).

Referring to claim 1, Lok discloses a mobile phone comprising a circuit board (col. 1, lines 5-55, "circuit board", "mobile phone"), and a connector comprising an insulative body (col. 1, lines 5-55, "battery connector comprises an elongate insulative base").

Lok does not disclose insulative body **having a first engaging sink for accommodating a microphone, and a second engaging sink for accommodating a coin battery, both being disposed on opposite sides of the insulative body; a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board.**

Wu discloses an insulative body having a first engaging sink for accommodating a microphone, and a second engaging sink for accommodating a coin battery, both being

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disposed on opposite sides of the insulative body (figure 2, and paragraphs 18-20, "signal connector 310 is mounted on the substrate board 300", note that the microphone 400 is one side of the connector and the battery is on the other side of the connector. Also note that the battery 600 of figure 2 is formed as a coin battery).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok by incorporating the teachings of Wu and consequently providing the insulative body to have a first engaging sink for accommodating a microphone, and a second engaging sink for accommodating a coin battery, both being disposed on opposite sides of the insulative body, motivation being to save space on the circuit board and provide space for function chip for the mobile phone.

The combination of Lok and Wu does not specifically disclose **a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board.**

Snyder disclose a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board (figure 5, note that there are three conductive terminal are reserved for microphone (audio circuit) and two conductive terminals for battery).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu by incorporating the teachings of Snyder and consequently providing a first conductive terminal, a second conductive

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terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board, motivation being to provide the battery and microphone to have proper connections so that power and audio signals are manipulated properly.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and still further in view of Patel et al (US Patent No. 5,823,820).

Referring to claim 2, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the first engaging sink comprises at least a side wall having two fixing sinks for fixing the first conductive terminal and the second conductive terminal.

Patel discloses the first engaging sink comprises at least a side wall having two fixing sinks for fixing the first conductive terminal and the second conductive terminal (col. 2, line 60-col. 3, line 5, "second opening 40 in major side wall 28 into cavity 24 for engaging center positive terminal").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Patel, and providing the first engaging sink to comprise at least a side wall having two

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fixing sinks for fixing the first conductive terminal and the second conductive terminal, motivation being for the purpose of allowing the terminals to get to the PCB.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and still further in view of Shimazaki et al (US Pub. No. 2002/0123375 A1).

Referring to claim 3, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the second engaging sink comprises a frame having two hollows corresponding to the location of the two fixing sinks.

Shimazaki disclose the second engaging sink comprises a frame having two hollows corresponding to the location of the two fixing sinks (figures 1-3, and paragraphs 5, 11, 15, 20 and 29).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Shimazaki and providing the second engaging sink to comprise a frame having two hollows corresponding to the location of the two fixing sinks, motivation being for the efficient installation of the battery.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in

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view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and still further in view of Ward et al (US Patent No. 6,183,299 B1).

Referring to claim 5, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the first engaging sink of the insulative body has a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal, with the other edge not penetrating the insulative body for accommodating the third conductive terminal, and a second trench penetrating the insulative body for accommodating the fifth conductive terminal.

Ward discloses insulative body has a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal (figure 13 and col. 7, lines 35-56).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Ward and consequently providing the first engaging sink of the insulative body of Lok/Wu/Snyder to have a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal, with the other edge not penetrating the insulative body for accommodating the third conductive terminal, and a second trench penetrating the insulative body for accommodating the fifth conductive terminal, motivation being to provide an efficient connections to the PCB.

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6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and further in view of well known prior art (MPEP 2144.03)

Referring to claim 6, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not disclose the third conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board for connecting with the microphone on the side of the first engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art.

It would have been obvious to one the ordinary skill in the art at the time invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the third conductive terminal for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the microphone on the side of the first engaging sink, so that it provides a connection to the circuit board and making a connection on the other side of the engaging sink.



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Referring to claim 7, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the fourth conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the fourth conductive terminal to comprise a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink, so that the coin battery is connected efficiently.

Referring to claim 8, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the fifth conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion

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toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the fifth conductive terminal to comprise a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink so that the coin battery is connected efficiently.

*Allowable Subject Matter*

7. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Sadler et al. U.S. Pub. No. 2003/0083018 A1 discloses the housing and internal components of a mobile phone.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LESTER G. KINCAID  
SUPERVISORY PRIMARY EXAMINER